

Supplemental Methods - Questionnaire

We evaluated the following characteristics as possible HPV cofactors in our population. Demographic variables evaluated included race (White, Black, Indian, Other), ethnicity (Hispanic, non-Hispanic), education (less than high school, high school graduate or equivalent, some college, vocational or trade school, completed college), household income (\leq \$5K, \$5,001-10,000, \$10,001-15,000, \$10,001-20,000, \$20,001-30,000, \$30,001-40,000, $>$ \$40,000), marital status (single, divorced, married, widowed), place of birth (Oklahoma, US/not Oklahoma, South America, other), and health care coverage (employer, health department, Medicaid/Medicare, self-insured, no insurance). Reproductive factors/history evaluated included menstruation (age at first menses, regularity, frequency), pregnancy (ever, never), total number of pregnancies (0, 1, 2, 3, 4, 5+), total number of live births (0, 1, 2, 3+), and oral contraceptive use by status (never, ever and never, current, former) and duration. Sexual behavior variables included years between menarche and first sexual intercourse ($<$ 2, 2-3, 4-5, 6+), age at sexual debut (\leq 16 years, 17, 18, 19-20, 21+) and whether it was their partner's first time, lifetime number of sexual partners (1, 2-3, 4-5, 6-10, 11+). Access to health care was evaluated by Pap history (ever, never) and number of Pap smears in the past five years (2 or more times/year, every year, every 2 years, every 3+ years). Smoking characteristics evaluated included smoking status (never, current, former), number of cigarettes per day, number of packs per day ($<$ 1, 1+), smoking duration ($<$ 10 years, 10+ years), number of pack-years ($<$ 5, 5 to $<$ 15, 15+), currently living with a smoker (yes, no), and whether other tobacco products were used (no, yes). Body mass index (BMI, kg/m²) ($<$ 20, 20 to $<$ 25, 25 to $<$ 30, 30+) was also evaluated. In addition, we evaluated Cesarean section (ever/never, number), infertility (unsuccessful pregnancy for $>$ 1 year), menstruation (age at first menses, regularity, frequency), sexual partner (partner's first time, age of partner), type of

contraception (injectable contraceptive, condom, diaphragm, intrauterine device, spermicide, patch, tubal ligation, partner vasectomy, Norplant), hormone use (estrogen), history and treatment of infections (kidney/bladder, yeast, trichomonas, genital warts, herpes, gonorrhea, other STD), douching practice, tampon use, presence of warts on hands/feet, abnormal bleeding (yes/no, after intercourse), abnormal discharge (yes/no, color, odor), current health problems, and family history of cancer (any reproductive organ and gynecologic cancer: cervix, uterus, vagina, vulva, ovary, other).